

## REMARKS

Amendments to the claims have been made to respond to the issues and concerns raised in the Office Action, to clarify aspects in the specification and claims, and to refine claim language. The amendments are believed to be consistent with the disclosure originally filed. The amendments also have been particularly presented to avoid, where applicable, any admission or estoppel, generally, negatively affecting the scope of protection provided by the disclosure and claims of the present application, and also in a manner that avoids prosecution history estoppel, limitation of the scope of equivalences, or the like. Claims 124-141 have been amended. Claims 1-123 and 142-143 have been cancelled. Claims 124-141 remain in the application and are believed in a condition for allowance.

It further is noted that the Applicant's representatives participated in a personal interview with the Examiner on November 15, 2005, and the amendments and points discussed in this response are believed to address the issues discussed therein.

Included with the Applicant's current response is an Information Disclosure Statement. Although the Information Disclosure Statement provides additional information for the Office to consider, such information possibly may be material to patentability and accordingly the Information Disclosure Statement is believed by the Applicant to be the only means to comply with its duties under 37 C.F.R. § 1.56.

The Office has raised certain enablement concerns with respect to the applicability of the claimed methods to non-bovine mammals. Please note the claims have been amended to recite only bovine mammals. This amendment is made solely to expedite examination of the application and should not be construed as an admission regarding the enablement concerns raised. It also should be noted the Applicant reserves the right to pursue the full scope of the originally filed claims in a continuation application as may be appropriate. However, it is believed the amendment responds to

the enablement concerns raised in the Office Action and discussed in the personal interview.

The Office has raised certain indefiniteness concerns with respect to the recitation of a “typical insemination dosage”. Please note the Applicant has amended the claims to recite the term “typical unsorted insemination dosage”. This amendment is made solely to expedite examination of the application and should not be construed as an admission regarding the indefiniteness concerns raised. It also should be noted the Applicant reserves the right to pursue the full scope of the originally filed claims in a continuation application as may be appropriate. However, it is believed the amendment provides sufficient clarity to the claims to address the indefiniteness concerns raised in the Office Action and discussed in the personal interview.

The Office has raised certain obviousness concerns with respect to the combination of Seidel (1996) with Brink. The Applicant respectfully disagrees with these concerns. In its reply dated March 30, 2005, the Applicant has pointed out that the specification at page 22, lines 11-22, states that sperm transport is compromised in superovulated cattle, so animals were frequently artificially inseminated on multiple occasions and/or with multiple doses of semen. The specification goes on to state that the combination of low dose insemination with superovulation is surprising because superovulation was previously deemed to hinder such a combination. With respect to the Seidel (1996) and Brink references, neither reference suggests that the combination of low dose insemination with superovulation would work. Accordingly, combining the references would provide no reasonable expectation of success to counter the prevailing view at the time that superovulation would hinder such a combination.

In the Office Action and in the personal interview, the Office has requested evidence and specific facts supporting the assertion in the specification that the combination of low dose insemination with superovulation is surprising. Please find included with this response as Appendix “I” an affidavit from George Seidel, Ph.D., an inventor on the current application and a widely recognized expert in the field of artificial

insemination of nonhuman mammals. Included with the affidavit as Exhibit "A" and Exhibit "B" are publications by Hawk and Saacke, respectively. As discussed in more detail the affidavit, these publications establish that the prevailing view among those having at least ordinary skill in the art in the field of artificial insemination of mammals is that sperm transport is compromised in superovulated mammals. The publications provide not only the expert opinions of their authors to support this point, but indeed cite the results of numerous studies and experiments reaching this conclusion. Moreover, as further described in the affidavit, each publication also points out that due to such compromised sperm transport, higher numbers of sperm may be required in superovulated mammals to achieve acceptable fertilization rates. Accordingly, the affidavit points out that combining known low dose artificial insemination techniques with known techniques for superovulating mammals would not provide a reasonable expectation of successfully achieving the fertilization rates recited by the claims, due to the prevailing view regarding compromised sperm transport as evidenced by the Hawk publication and the Saacke publication. Indeed, the affidavit points out that the trend towards using higher numbers of sperm for artificially inseminating superovulated mammals, again as evidenced by the Hawk publication and the Saacke publication, may actually teach away from the low dose techniques of the current invention.

The Office has raised certain obviousness concerns with respect to the Seidel (1997) reference. Unless a reference is a statutory bar, it may be removed and the rejection may be overcome by a showing that the reference was published by the Applicant himself. MPEP § 715.01(c); In re Facius, 408 F.2d 1396 (CCPA 1969). Please find attached as Appendix "II" to this response an affidavit from George Seidel, Ph.D., an author of the Seidel (1997) reference and inventor on the present application. Please note that the affidavit is directed to the subject matter of the present application and addresses the role of each co-author on the publication and each inventor on the present application. Note also the scope and form of the affidavit are the same as that of a similar affidavit successfully used in the parent case of the present application for the same purpose of removing the Seidel (1997) reference. Accordingly, it is believed the affidavit is sufficient to remove the Seidel (1997) reference.

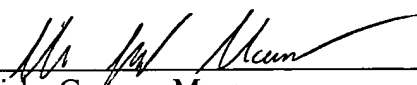
The Office has raised several nonstatutory double patenting concerns. Please find attached to this response as Appendix "III" a terminal disclaimer that the Applicant believes is sufficient to overcome these concerns.

It is believed any remaining issues raised in the Office Action or personal interview have been addressed or made moot by the points discussed in this response.

The Applicant, having addressed each of the concerns raised in the Office Action, respectfully requests reconsideration and withdrawal of the rejections and objections to the application. Allowance of claims 124-141 is requested at the Examiner's earliest convenience.

Dated this 13 day of December, 2005.

Respectfully submitted,  
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